Complete Summary

GUIDELINE TITLE

Metatarsalgia/intractable plantar keratosis/Tailor's bunion.

BIBLIOGRAPHIC SOURCE(S)

Academy of Ambulatory Foot and Ankle Surgery. Metatarsalgia/intractable plantar keratosis/Tailor's bunion. Philadelphia (PA): Academy of Ambulatory Foot and Ankle Surgery; 2003. 6 p. [26 references]

COMPLETE SUMMARY CONTENT

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INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY

SCOPE

DISEASE/CONDITION(S)

- Metatarsalgia
- Intractable plantar keratosis
- Tailor's bunion

GUIDELINE CATEGORY

Diagnosis Treatment

CLINICAL SPECIALTY

Podiatry

INTENDED USERS

Podiatrists

GUIDELINE OBJECTIVE(S)

To provide recommendations for the diagnosis and treatment of metatarsalgia, intractable plantar keratosis, and Tailor's bunion

TARGET POPULATION

Patients with metatarsalgia, intractable plantar keratosis, and Tailor's bunion

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

- 1. History, including an evaluation of the chief complaint (nature, location, duration, onset, course, anything that improves or exacerbates, any previous treatment) and past medical history(medications/allergies, medical history, surgical history, family history, social history)
- 2. Physical examination, including peripheral vascular, neurological, orthopedic(palpation, biomechanical/gait analysis, range of motion), and dermatological exams
- 3. Diagnostic procedures, including radiographic examination, laboratory tests, additional tests (nerve conduction studies, electromyography [EMG], noninvasive vascular testing)

Treatment

- Nonsurgical treatments, including debridement, padding, shoe modifications, oral anti-inflammatory medications (NSAIDs), anti-inflammatory injectables, orthotics
- Surgical treatments, including metatarsal osteotomy (percutaneous, transverse, "V" shaped, or bi- or tri- plane, partial or "through and through"), excision of all or part of a metatarsal head and/or shaft, intramedullary decompression
- 3. Postoperative management, including x-rays, foot gear, and orthotics

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The guideline development process began with a thorough MEDLINE search as well as a "call for papers" from the membership of the Academy of Ambulatory Foot and Ankle Surgery at large.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Drafts of the guidelines were reviewed in detail by each member of the Board of Trustees.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

- I. Diagnosis
 - A. History: This may include any of the following:

- 1. An evaluation of the chief complaint (including the nature, location, duration, onset, course, anything that improves or exacerbates, and any previous treatment).
- 2. The past medical history (including medications/allergies, medical history, surgical history, family history, and social history).
- B. Physical examination: The following may be important parts of the appropriate examination:
 - 1. Peripheral vascular
 - 2. Neurological
 - 3. Orthopedic (involvement may be ascertained by examining the foot in either the weight bearing or non-weight bearing positions)
 - a. Palpation
 - b. Range of motion
 - c. Biomechanical/gait analysis
 - 4. Dermatological (presence of lesions or hyperkeratoses).

II. Diagnostic Procedures

- A. Radiographic examination: X-rays should be taken. They may be used to evaluate the type of deformity as well as other factors. X-rays may be weight bearing, partial weight bearing, or non-weight bearing.
- B. Laboratory tests: Not required in the nonsurgical patient, unless underlying factors exist (i.e., infection or inflammatory disease). Blood and urine tests may be indicated for the surgical patient at the discretion of the surgeon based on the patient's medical history.
- C. Additional tests (nerve conduction studies, electromyography (EMG), noninvasive vascular testing). These studies may be utilized in isolated situations when deemed necessary.

III. Nonsurgical Treatment

- A. The primary reasons for nonsurgical treatment are:
 - 1. Due to the patient's health status, surgery is contraindicated
 - 2. The patient does not want surgery
- B. Types of nonsurgical treatment:
 - 1. Debridement
 - Padding
 - 3. Shoe modifications
 - 4. Oral anti-inflammatory medications (NSAIDs)
 - 5. Anti-inflammatory injectables
 - 6. Orthotics

IV. Surgical Treatment

- A. The primary reasons for surgical treatment are:
 - 1. Failure of nonsurgical treatment
 - 2. Impracticality of nonsurgical treatment
 - 3. The patient desires correction of a presenting deformity that is painful and/or causes a degree of loss of function.
 - 4. The patient is informed of the procedure(s) to be performed, the treatment alternatives, and the reasonable risks involved and elects to have surgical intervention.
- B. Site of surgery: The surgical treatment of metatarsalgia, intractable plantar keratosis (IPK), and Tailor's bunion is usually performed in the doctor's office, however, the hospital or an ambulatory center may also be appropriate.

- C. Anesthesia: Local anesthesia is sufficient, unless there are extenuating circumstances.
- D. Hemostasis: Absence of bleeding is not required.
- E. Surgical preparation: aseptic preparation ("usual" aseptic scrub, prep, draping, and sterility).
- F. Preoperative lab: May or may not be necessary based on the patient's past medical history and current medical status.
- G. Prophylactic antibiotics: At the discretion of the surgeon (or based upon requirement: i.e., mitral valve prolapse).
- H. Pathological analysis of surgically removed tissue: Recommended.
- I. Bilateral or multiple surgery: May be performed at the same surgical session, or in different surgical sessions.
- V. Surgical Procedures for the Correction of Metatarsalgia/IPK/Tailor's Bunion

Procedures may be performed as isolated situations or in conjunction with other procedures.

- A. Metatarsal osteotomy may be:
 - 1. Percutaneous
 - 2. Transverse, "V" shaped, or bi- or tri-plane
 - 3. Partial or "through and through"
- B. Excision of all or part of a metatarsal head and/or shaft may be performed at appropriate times to treat these conditions.
- C. Intramedullary decompression (IMDC)

VI. Fixation

Fixation may be via internal, percutaneous, or external means such as casts, splints, surgical shoes, or adhesive forms of dressings. Internal fixation is generally not required and is at the discretion of the surgeon.

VII. Postoperative Management

The patient may ambulate during the recovery period. X-rays should be taken postoperatively and may be taken thereafter to access the healing. Postoperative foot gear may include a surgical shoe or other form of restrictive footwear. Generally, a surgical dressing is applied in the immediate postoperative period. This is modified with time and the postoperative course. The return to a normal shoe is based upon the procedure(s) performed and the postoperative course of the individual patient. Orthotics may be useful postoperatively.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Treatment may relieve or reduce pain, reduce the deformity, eliminate lesions (or reduce severity), and arrest progression of deformity.

POTENTIAL HARMS

Postoperative Complications

- Edema
- Recurrence/regrowth
- Pain
- Numbness
- Stiffness
- Shortening of digits/metatarsals
- Malposition
- Nonunion
- Delayed union
- Transfer lesions
- Vascular complications
- Reflex sympathetic dystrophy

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better Living with Illness

IOM DOMAIN

Effectiveness Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2000 (revised 2003 Sep)

GUIDELINE DEVELOPER(S)

Academy of Ambulatory Foot and Ankle Surgery - Medical Specialty Society

SOURCE(S) OF FUNDING

Academy of Ambulatory Foot and Ankle Surgery (AAFAS)

GUIDELINE COMMITTEE

Preferred Practice Guidelines Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

The committee consisted of five (5) members who were board certified, had a minimum of ten (10) years of clinical practice experience, and a minimum of five (5) years of teaching experience.

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUI DELI NE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Academy of Ambulatory Foot and Ankle Surgery. Metatarsalgia/intractable plantar keratosis/Tailor's bunion. Philadelphia (PA): Academy of Ambulatory Foot and Ankle Surgery; 2000. 13 p.

The guideline is reviewed and updated twice a year as needed (in May and October).

GUIDELINE AVAILABILITY

Electronic copies: Not available at this time.

Print copies: Available from the Academy of Ambulatory Foot and Ankle Surgery (AAFAS) (formerly the Academy of Ambulatory Foot Surgery), 1601 Walnut Street, Suite 1005, Philadelphia, PA 19102; Web site, www.academy-afs.org.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on October 12, 2000. The information was verified by the guideline developer as of December 8, 2000. This summary was updated by ECRI on December 19, 2003. The information was verified by the guideline developer on December 29, 2003.

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